Minnesota State University Moorhead

WS 300: Biology of Women

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: Goal 03 - Natural Science

A study of the gender-related aspects of the biology and behavior of women, including a critical examination of research in this field. Appropriate as a elective only for Biology majors who choose the Health and Medical Science emphasis or the Life Science Emphasis. Lab included. Same as BIOL 300. MnTC Goal 3.

B. COURSE EFFECTIVE DATES: 04/26/2005 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Physiology--how does the body work? Lecures and Scientific American readings are used to teach this component. Topics include fertility, reproduction, sex determination and DNA.
2. Pathophysiology--what happens when things don't work or how do we alter mechanisms? Lectures, documentaries and Scientific American readings are used to teach this component. Topics include ambigous sex determiation, xenoestrogens, cancer and overmedication.
3. Political and Social Issues--why are things set up the way they are or how should they be? Numerous documentaries and discussion/debates address this component. Topics include gender assignment, sex education, vaccination, population explosion and societal and ecological impacts, genetically modified foods, and forensics to find missing persons. (with all the technology we have why are there still thousands of women in Juarez Mexico going missing?)
4. Ecology--Human Population, World Huger, Agricultural Approaches-Sustainability and Polyculture vs. Genetically Modified crops and Monoculture.

D. LEARNING OUTCOMES (General)

1. Mastery of scientific content from the following areas: Endocrinology, Cell Biology, Human Reproduction, Sex Determination, Cancer Biology, DNA and Forensic Analysis, Human Genetics.
2. Recognize a range of valid positions on an issue and articulate values, assumptions, and cultural perspectives which underlie these positions; students will be required to address these requirements on topics such as abstinance, xenoestrogens, vaccination and hormone replacement therapies.
3. Numerous scientific issues are discussed with regard to cultural perspectives; lectures will present material the scienntific issues outlined above, and include female genital mutilation, and then students will discuss how cultural perspectives impact the issues above.
4. Gather/use information/evidence to evaluate these positions in culturally-sensitive, discipline-specific ways.
5. Extensive discussion and numerous readings first present information from a variety of disciplines in the scientific areas, then challenge students to evaluate these findings in light of the cultural practices of the day, and compare them to the cultural practices of today. Eugenics and other movements to limit reproduction of minorities are examples of the discussion topics.
6. Define their own position and recognize connections to their own cultural traditions, values, and assumptions. Prepare a presentation and write a research paper on a topic where students are asked to present scientific content, historical background and take a position on an issue, then define their position and state why.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

Goal 03 - Natural Science

1. Demonstrate understanding of scientific theories.
2. Formulate and test hypotheses by performing laboratory, simulation, or field experiments in at least two of the natural science disciplines. One of these experimental components should develop, in greater depth, students' laboratory experience in the collection of data, its statistical and graphical analysis, and an appreciation of its sources of error and uncertainty.
3. Communicate their experimental findings, analyses, and interpretations both orally and in writing.
4. Evaluate societal issues from a natural science perspective, ask questions about the evidence presented, and make informed judgments about science-related topics and policies.

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted